# Solid Waste UPDATE







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## Get Caught 5!



## Stutzman Refuse Disposal/Waste Connections, Inc.

## **Single Stream Recycling Processing Plant**

by Joe Cronin, Bureau of Waste Management

Stutzman Refuse Disposal, now owned by Waste Connections Inc., operates the only single stream

recycling processing plant in central Kansas. The facility, located in Hutchinson, recently expanded. As of January 14, the plant can now process up to 4000 tons per month. As a single stream



recycling facility, the plant receives mixed loads of newspaper, magazines, cardboard, glass, plastic beverage

containers #1-#7, and aluminum & steel beverage/food containers which are then separated. The separation process includes mechanical, pneumatic, gravity, and hand sorting into recyclable commodities.

Sometimes this type of operation is referred to as a materials recovery

facility or MRF (murf). This plant is considered as a "clean MRF" since solid waste is not received with the recyclables. Since the facility only handles recyclables,

a solid waste processing permit is not required.

Stutzman Refuse
Disposal, a long time
trash hauler in Reno and
Rice counties, opened
the recycling facility in
2008. Waste Connections
purchased the business
in 2010. Originally, the
recycling plant processed

material from the Hutchinson area and from the Harvey County Recycling Facility. As the volume increased from 500 tons per

month to 2000 tons, the need for a major upgrade became evident. Waste

(continued on page 4)

## **CRT Disposal Program to Continue**

by Kristine Hicks, Bureau of Waste Management

The Kansas
Department of Health
and Environment's
(KDHE) Bureau of
Waste Management is
continuing to offer a
financial aid program
for counties, cities,
and regional solid

waste management entities to offset the costs experienced by local governments to properly dispose of the electronic waste category called Cathode Ray Tubes (CRTs). CRT glass is difficult to recycle because it contains lead. Typical CRT TVs or monitors each contain four to eight pounds of lead in the glass tube, and the inside of the tubes get coated with phosphor dust. Through this "CRT initiative",

(continued on page 7)

## Waste Composition Study Summary

by Rodney Ferguson, Bureau of Waste Management

This Fall, the Bureau of Waste Management worked with Engineering Solutions & Design to revisit the 2002 statewide waste characterization study to determine if our waste stream has changed with time. In September, one-day waste sorts were conducted at the five original sites where the 2002 study was conducted: Anderson County Waste Station, Western Plains Regional Landfill, Rooks County Landfill, Rolling Meadows Recycling & Disposal Facility and Wilson County Transfer Station. This 'snapshot' data was then compared to the data from the original comprehensive study from 10 years ago. Some of the noteworthy results showed a reduction of over 50 percent in newspaper, corrugated paper and magazines. The drop in these materials contrast with significant increases in PETE #1, 'other' plastics, diapers, 'other' glass, aluminum and food waste.

For more information including summary data charts comparing the two studies, see <a href="http://www.kdheks.gov/waste/media/Waste%20Characterization/index.html?v=W8vH-WNfEjo">http://www.kdheks.gov/waste/media/Waste%20Characterization/index.html?v=W8vH-WNfEjo</a>

# Alternate Daily Cover Use at Municipal Solid Waste Landfills

by Sam Sunderraj, Bureau of Waste Management

Kansas solid waste regulations authorize the use of alternative materials or procedures to satisfy the daily cover requirement at MSW landfills. The alternative should achieve the equivalent of covering the waste with six inches of soil – control litter, odors, minimize access to the waste from disease carrying vectors (birds, rodents, and insects) and minimize the threat of fires at the working face.

The most popular alternative cover used by small and large MSW landfills is spray on slurry that coats the waste and promptly dries into a "crust". This system saves on the cost of equipment and fuel compared to soil, and conserves valuable disposal volume. Tarps and fabricated panels are also used to cover the working face, and these of course are removed the following morning to allow more waste to be placed.

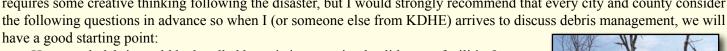
Creative options such as using ground up asphalt shingles, processed tires, or contaminated soil from cleanup sites have also been approved.

## Would You be Ready if a Tornado Struck Your City or County?

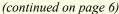
by Bill Bider, Director, Bureau of Waste Management

Every year one or more tornados strike somewhere in Kansas. Over the past several years, major damage has occurred in Greensburg, Chapman, Manhattan, Reading, Harveyville, and Wichita. Where will the next storm strike? Will we see a major storm again in 2013? Overall, the chances that one or more Kansas towns will be hit is nearly 100 percent.

So, is your city or county prepared to manage the debris that will be generated if a tornado strikes? The extent of damage and amount of debris could range from minor to catastrophic. Regardless of the storm impacts, every community should have some idea of how they would manage the generated debris. From experience, I have learned that every tornado requires some creative thinking following the disaster, but I would strongly recommend that every city and county consider



- How much debris could be handled by existing permitted solid waste facilities?
- What is the distance from each city to existing permitted facilities (ideal haul distance should be less than 10 miles)?
- What facility modifications would be needed and are possible to facilitate expanded operations including efficient traffic routes?
- Are temporary debris storage or processing sites likely to be needed? What areas would work best?
- Does the city or county own property that could be used for storage, processing, or permanent disposal?
- Does an area exist where trees and brush could be stored long-term awaiting a time to burn and/or process into mulch/wood fuel?
- Who would be assigned debris management tasks including monitoring and operating of debris management facilities?





## **Paunch Composting in Kansas**

by Ken Powell, Director, Bureau of Waste Management

Most of the composting facilities in Kansas only accept yard waste. A few accept other materials including food waste and some industrial wastes but the two largest composting facilities in Kansas accept another material as

their main product. These two facilities accept paunch manure from the beef packing plants in Liberal and Dodge City. Both sites are permitted as source-separated organic waste composting facilities.

Paunch manure is the partially digested feed removed from cattle at the time of slaughter. An animal may have 40+ pounds of paunch

manure that can be recovered during the slaughtering process. A beef packing plant that slaughters 6,000 animals per day produces at least 120 tons per day. Seward County Landfill accepts over 220 tons per day and Chamness Technology, Inc. accepts over 55 tons per day at their Dodge City facility.

Seward County accepts the material from two National Beef plants and Chamness accepts the material from the Cargill plant in Dodge City. This material comes to them with a distinct odor that must be managed to prevent offsite odor complaints. A good pad and complete management of all water at the site is required for these facilities.

Seward County markets their product in bags and bulk to the public, and keeps enough to build their final cap for the landfill. Chamness markets their compost in bulk to the public and to the agriculture community.

### **Litter Control at MSW Landfills** (options for success and failure)

by Mike Selm, Bureau of Waste Management

Kansas solid waste regulations state that "The owner or operator shall patrol the facility to check for litter accumulation and take all necessary steps to minimize blowing litter, including the use of screens. All litter shall be collected and placed in the fill or in a secure, covered container for later disposal". Regulations also state that "The owner or operator shall implement a plan for litter control for all vehicles on the permitted facility site".

To successfully control litter operators use the following strategies.

- 1. Keep the open working face as small as practical to provide adequate disposal area while minimizing exposure of the freshly disposed waste.
- 2. Place litter control screens close to the working face to trap litter where it can be promptly managed. These screens are placed before the site is opened for disposal of waste, and may need to be repositioned if wind directions change during the day.
- 3. Use spray on alternate daily cover during disposal operations to tack the waste down and keep litter from getting airborne
- 4. Employ adequate help to keep litter picked up manually when the primary controls noted above are not sufficient.

It is noteworthy that BWM Policy 02-03 allows some flexibility in case of adverse weather, provided efforts are being made to address litter immediately after the adverse weather situation.

### **DOES YOUR** COUNTY OR COMMUNITY HAVE AN ILLEGAL **DUMPING SITE?**



**BEFORE** and After



### Funds are available to help cleanup

- up to \$10,000 per site
- · in-kind services can be used to cover a required 25% local match
- no minimum site amount
- all local governments are encouraged to seek assistance

Contact the KDHE Bureau of Waste Management at 785-296-1600



## New Chapter for Closed Landfills

by Kathleen Bleach and Maureen Ruhlman, Bureau of Waste Management

If you have been working with KDHE personnel regarding closed landfills within the last year, you have probably noticed some project management staffing changes. In January 2012, the responsibility for the oversight for closed landfills was transferred within the Kansas Department of Health and Environment (KDHE) from the Bureau of Environmental Remediation (BER) to the Bureau of Waste Management (BWM). This responsibility was transferred to the Hydrogeology Unit which operates under the Solid Waste Permits Section of the BWM. This unit is now responsible for the oversight of groundwater quality at both active and closed landfills.

Closed landfills are broadly categorized into sites where groundwater monitoring is ongoing and sites where only cap inspections are required. For the sites with required groundwater monitoring, the frequency of the monitoring is based on the date of closure and preexisting agreements between the facilities and KDHE. Currently there are 123 closed landfill sites. The majority (95) are required to monitor groundwater quality. BWM project managers were assigned to maximize efficiency and consistency. For example, some closed landfills, in proximity to active facilities, were assigned to the BWM continued on page 6)



# Solid Waste Facility Operators and Managers Training Needs

Available online at: kdheks.gov/waste

Survey closes April 1

## **New Regulation for C&D Landfills**

New regulations KAR 28-29-330 through 28-29-333 can be found on the BWM web site at <a href="www.kdheks.gov/waste">www.kdheks.gov/waste</a> under the Regulations, Policies, & Technical Guidance section.

- These regulations apply to the subset of construction and demolition landfills in Kansas most likely to produce hazardous and explosive gases such as hydrogen sulfide and methane
- Most of these landfills are located either in flood plains or quarries
- Some additional design, operational, and post-closure requirements will apply to new units at these landfills that exceed a certain size limit
- These requirements will reduce the risk of the public being exposed to dangerous landfill gases
- The regulations went into effect December 28



Kansas Department of Health and Environment - Bureau of Waste Management

www.kdheks.gov/waste www.getcaughtrecycling.org www.kansasdontspoilit.com www.kansasgreenteams.org

## Stutzman Refuse Disposal

(continued from page 1)

Connections oversaw an expansion that added to the existing building, increased the tipping floor size, and added processing equipment. This facility is unique since it processes glass (all colors) by grinding to almost a fine powder. This requires 6 different machines, an oven, and equipment to blow the product into tanker trucks. The ground glass is used to make fiberglass insulation by the Johns Manville Plant in McPherson.

This Recycling Plant now services many cities in central Kansas including those in Sedgwick, Kingman, Reno, Rice, and Harvey counties. The Harvey County Recycling Facility now acts as a recycling transfer station for the single stream recycling plant. Jim Spencer, Division Vice President for Kansas, says that they are always looking to expand the business.

## Oil and Gas Drilling Waste Management

Kansas state law now allows controlled land-spreading as a disposal method for the cuttings and drilling mud generated by drilling oil and gas wells. See K.S.A. 65-3407c(a)(8)

An application form and guidelines can be found at the following Kansas Corporation Commission website:

http://www.kcc.state.ks.us/ conservation/forms/land\_ spreading.htm

Regulations that further define land-spreading requirements are under development and expected to be adopted by KDHE in the fall of 2013.

# Construction of Disposal Cells at Landfills

Kansas landfills make sure that adequate disposal capacity exists to meet the needs of citizens and businesses. This is very important for communities to thrive and be successful. Kansas landfills have good overall landfill capacity. Disposal is only authorized in permitted areas that have been constructed according to design under the oversight of an engineer. Let us make sure we construct disposal areas adequately and correctly to meet the disposal needs.



### Get to Know KDHE Solid Waste Staff

## **Dennis Degner**

Professional Environmental Engineer



**Position in KDHE/BWM:** Chief, Solid Waste Permits Section

**Education:** U. of Wisconsin-Platteville, BSCE, 1965 U. of Minnesota, Ph.D. in Environmental

Health Engineering, 1974

**Professional licensure:** Professional Engineer, Kansas, 1975 to

presen

**Other job experience:** Commissioned Officer in the U.S.

Public Health Service & U.S. EPA,

1966-1987

Burns & McDonnell Engineering

Company, 1987-1996

**Favorite pastime activities:** Walking and participating in yoga for

fitness

Watching KU basketball and Green Bay Packer football games Taking my grandchildren to educational and cultural events

**Favorite food:** Ground beef b-b-q sandwiches as made by Mrs.

Degner

People who influenced my

life significantly:

Jess Sherman, my high school chemistry and physics teacher (to attend college to earn an engineering degree); Don Townley, my first supervisor and Captain in the US Public Health Service (regarding deveopment of my professional engineering and management career); and my parens (as examples of perseverance and dedication to their job,

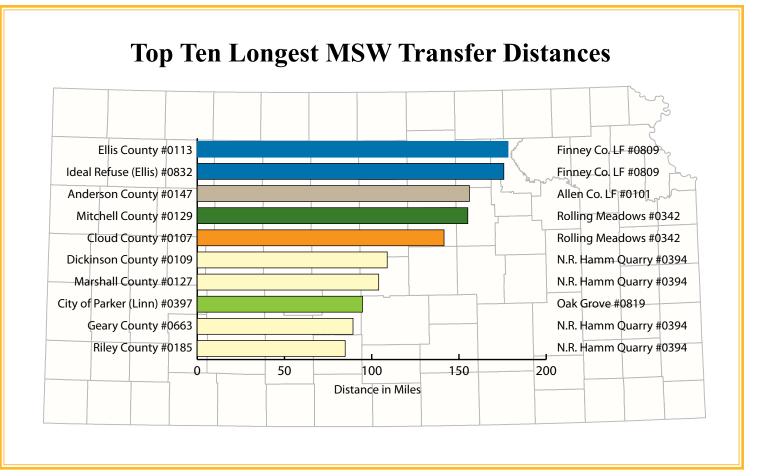
church, and family)

**Book I'd recommend:** Super Immunity: The Essential Nutrition Guide

for Boosting Your Body's Defenses to Live Longer, Stronger, and Disease Free - Joel

Fuhrman, M.D. 2011

Vacation spot I'd recommend: Wisconsin Dells, Wisconsin



#### New Chapter (continued from page 4)

staff already overseeing the active landfills. This allows current owner/operators with both closed and active permitted landfills to have one primary contact at KDHE.

Previous practices were inconsistent on whether KDHE staff would be present during groundwater sampling events. Current policy is to attend groundwater sampling events at facilities at least once a year to ensure proper sampling techniques and then to evaluate the laboratory results for conformance to KDHE's groundwater quality standards. Where possible, BWM staff completes annual cap inspections in conjunction with groundwater monitoring events. Where sites have less frequent groundwater monitoring, cap inspections are completed by district staff or Topeka staff, depending on location. Using district staff for cap inspections also reduces the frequency of multiple inspections to one facility by BMW staff members. To improve consistency during cap inspections, an inspection checklist was developed and is being used to document every inspection. Even though district staff may conduct cap inspections, these reports are still sent to the assigned project manager in the Topeka office for review and follow-up. So far, the transition has been seamless. BWM staff have been working well together to coordinate field activities to minimize expenditures and maximize efficiency and quality in oversight of the closed permitted landfills. If you have questions about the oversight of closed landfills, contact BWM staff at 785-296-1600.

#### Would You be Ready?

(continued from page 2)

- Who would coordinate communications with the public regarding the segregation of debris to facilitate collection and proper disposal or recycling?
- What neighboring cities or counties would likely provide assistance in the form of qualified staff, equipment, etc.?

I recommend developing one or more maps that identify locations to haul and manage debris from each city and preferred transportation routes. General information is more important than details because the nature and extent of damage will need to be considered to fine tune any preliminary plans. Any work you do to prepare your communities for a possible tornado will be quite valuable to the public officials who must make many difficult decisions under the stressful conditions that accompany every natural disaster.

#### **CRT Disposal Program**

(continued from page 1)

KDHE reimburses a portion of the costs to properly recycle cathode ray tubes that have been collected from Kansas residents, Kansas schools, or Kansas government offices but not from businesses or out of state waste. There is a minimum of 200 units to qualify for the funding and claimants must use a KDHE permitted electronics waste processor or another recycling facility pre-approved by BWM in order to receive reimbursement. Out of state companies that have achieved E-Steward status or are certified to the responsible recycling (R2) standard are also approved recyclers for this program.

Applications are available on the BWM webpage. Fifteen contracts were processed last year with an average reimbursement of \$3,600. Over 700,000 pounds of e-waste has been recycled (16,017 CRTs) since the first contract in 2011.

This program is being carried out under the authority granted to KDHE under K.S.A. 65-3415a. The Bureau of Waste Management will continue to monitor the national factors because mismanagement and decreasing markets have caused price wars and stockpiling of collected glass.





## Go Green Save Paper Save Trees

## Receive the Solid Waste Update via email

To sign up, send an email to bwmweb@kdheks.gov

www.kdheks.gov/waste





Keynote Speakers



Bill Snyder, Coach KSU Football



Mike Strickland Environmental, Health & Safety Mgr Sherwin-Williams

#### Plenary Speaker



Timothy Boswell Safety Engineer Westar Energy

- Waste Reduction & Local Assistance
- Beneficial Use/Energy from Waste
- Composting
- Household Hazardous Waste
- Safety Demos

kdheks.gov/waste





Kansas Department of Health & Environment Bureau of Waste Management 1000 SW Jackson, Suite 320 Topeka, Kansas 66612-1366

264-21

#### ADDRESS SERVICE REQUESTED



#### **Calendar Items**

March 26-27

May 7

May 14

August 13-15

Oct 1-2

Nov 6-7

WORKS! Conference, Manhattan, KS

KDHE Financial Assurance Workshop - Garden City, KS

KDHE Financial Assurance Workshop - Emporia, KS

Kansas Environmental Conference - Topeka, KS

Kansas Organization of Recyclers (KOR) 2013 Confeence - Lawrence, KS

SWANA & KDHE Solid Waste Management Conference and Operator Training Course



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